

IN THE CLAIMS

1. (Previously Presented) A printed wiring board having a portion to be sealed from moisture, the printed wiring board comprising:

a glass substrate provided with through-holes, the glass substrate having a sealed side surface facing the portion to be sealed from moisture and an exposed side surface;

conductive patterns provided on each surface of said glass substrate wherein a conductive pattern on the sealed surface of said glass substrate is in electrical communication with a conductive pattern on the exposed side surface via said through-holes, the conductive patterns on said sealed side surface being connected to at least one display element; and

a sealing member provided to fill said through-holes, said sealing member being operable to inhibit moisture permeation through said through-holes.

2. (Original) A printed wiring board according to claim 1, wherein said glass substrate is a no-alkali glass substrate.

3. (Original) A printed wiring board according to claim 1, wherein said sealing member is a conductive paste containing an epoxy resin as a binder.

4. (Original) A printed wiring board according to claim 1, wherein a conductive film is provided on an inner wall surface of each of said through-holes in such a manner as to connect said conductive patterns provided on both surfaces of said glass substrate to each other, and

an inner space, inside said conductive film, of said through-hole is filled with said sealing member.

5. (Original) A printed wiring board according to claim 4, wherein said sealing member is an epoxy resin.

6. (Original) A printed wiring board according to claim 4, wherein the surface of said sealing member exposed from each of said through-holes is covered with a metal film.

7. (Cancelled)

8. (Original) A printed wiring board according to claim 1, wherein each of said conductive patterns has a stacked structure of an epoxy resin film and a copper film formed thereon.

9. (Previously Presented) A display apparatus comprising:

a printed wiring board including a glass substrate provided with through-holes, the glass substrate having a sealed side surface to be sealed from moisture and an exposed side surface, conductive patterns provided on each surface of said glass substrate wherein a conductive pattern on the sealed surface of said glass substrate is in electrical communication with a conductive pattern on the exposed side surface via said through-holes, the conductive patterns on said sealed side surface being connected to at least one display element, and a first sealing member provided to fill said through-holes;

a display device provided on one surface of said printed wiring board in such a manner as to be connected to said conductive pattern provided on said one surface of said printed wiring board;

a drive component for driving said display device, said drive component being disposed on the exposed surface of said printed wiring board in such a manner as to be connected to said conductive pattern provided on said other surface of said printed wiring board;

a protective glass board disposed in such a manner as to face to said one surface of said printed wiring board; and

a second sealing member provided in such a manner as to surround said display device while being in contact with said printed wiring board and said protective glass board.

10. (Original) A display apparatus according to claim 9, wherein said glass substrate is a no-alkali glass substrate.

11. (Original) A display apparatus according to claim 9, wherein said first sealing member is a conductive paste containing an epoxy resin as a binder.

12. (Original) A display apparatus according to claim 9, wherein a conductive film is provided on an inner wall surface of each of said through-holes in such a manner as to connect said conductive patterns provided on both surfaces of said glass substrate to each other, and

an inner space, inside said conductive film, of said through-hole is filled with said first sealing member.

13. (Previously Presented) A display apparatus according to claim 12, wherein said second sealing member is an epoxy resin.

14. (Original) A display apparatus according to claim 12, wherein the surface of said first sealing member exposed from each of said through-holes is covered with a metal film.

15. (Previously Presented) A display apparatus comprising:
a printed wiring board including a glass substrate provided with through-holes, the glass substrate having a sealed side surface to be sealed from moisture and an exposed side surface, conductive patterns provided on each surface of said glass substrate wherein a conductive pattern on the sealed surface of said glass substrate is in electrical communication with a conductive pattern on the exposed side surface via said through-holes, the conductive patterns on said sealed side surface being connected to at least one display element, and a first sealing member provided to fill said through-holes;

bumps provided on said conductive pattern provided on one surface of said printed wiring board;

a protective glass board disposed in such a manner as to face to said one surface of said printed wiring board;

a display device provided on the surface, facing to said printed wiring board, of said protective glass board in such a manner as to be connected to said bumps;

a drive component for driving said display device, said drive component being disposed on the other surface of said printed wiring board in such a manner as to be connected to said conductive pattern provided on said exposed surface of said printed wiring board; and

a second sealing member provided in such a manner as to surround said display device while being in contact with said printed wiring board and said protective glass board.

16. (Original) A display apparatus according to claim 15, wherein said glass substrate is a no-alkali glass substrate.

17. (Original) A display apparatus according to claim 15, wherein said first sealing member is a conductive paste containing an epoxy resin as a binder.

18. (Original) A display apparatus according to claim 15, wherein a conductive film is provided on an inner wall surface of each of said through-holes in such a manner as to connect said conductive patterns provided on both surfaces of said glass substrate to each other, and an inner space, inside and conductive film, of said through-hole is filled with said first sealing member.

19. (Original) A display apparatus according to claim 18, wherein said first sealing member is an epoxy resin.

20. (Original) A display apparatus according to claim 18, wherein the surface of said first sealing member exposed from each of said first sealing member exposed from each of said through-holes is covered with a metal film.